REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed August 4, 2006. Upon entry of the amendments in this response, claims 1-22 are pending. In particular, Applicants have amended claims 1, 9, 12, 19 and 20. It should not be presumed that Applicants agree with any statements made by the Examiner in the Office Action unless otherwise indicated by the Applicants.

In the Office Action, claims 1-22 are rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter. Claims 1-22 are also rejected under 35 U.S.C. §112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants respectfully request entry of the following amendments and remarks contained herein. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

I. Claim Rejections – 35 U.S.C. § 101

Claims 1-22 stand rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter. Specifically, the Office Action alleges that "the claims are directed to a method or process for performing a sequence of steps which is merely a program per se." The Office Action further alleges that "while the program contains functionally descriptive material the recording of the functionally descriptive material on some computer-readable medium which would enable the functionality to be realized fails to be recited." (Office Action, pg. 2)

Claims 1-11 Comply with 35 U.S.C. §101

The Office Action claims that claims 1-22 are allegedly directed to non-statutory

subject matter. Applicants disagree. Claims 1-11 are directed to a method. As defined by

Congress, 35 U.S.C. §101 recites that among others, a "process" is statutory subject matter. In

that a method is a process, Applicants submit that claims 1-11 are directed to allowable statutory

subject matter. Thus for at least these reasons, Applicants submit that the Office Action does not

make a *prima facie* case that claims 1-11 are directed to non-statutory subject matter.

Accordingly, Applicants respectfully submit that the rejection to claims 1-11 under §101 should

be withdrawn, and claims 1-11 should be placed in condition for allowance.

Claims 12-22 Have Been Amended to Comply with 35 U.S.C. §101

In an effort to comply with the Office Action request, Applicants have amended claim

12. Claim 12 now recites:

> **12. *A computer-readable medium having a program stored thereon for generating pseudo-random numbers, the program comprising:***
> one or more instructions for loading a current seed value S_j from a non-volatile storage;
> one or more instructions for loading a value, E, representative of environmental randomness;
> one or more instructions for loading a value, C, representative of configuration data;
> one or more instructions for loading a first fixed value, A;
> one or more instructions for loading a second fixed value, B;
> one or more instructions for generating a new seed value, S_{j+1}, in accordance with the following equation:
> $$S_{j+1}=f (S_j; A; C; E),$$ wherein f represents a selected encryption algorithm, and wherein S_j is concatenated with A, which is concatenated with C which is concatenated with E;
> one or more instructions for writing the new seed value S_{j+1} to the non-volatile storage;
> one or more instructions for generating a key, K, in accordance with the following equation:

$$K=f (S_j; B; C; E); \text{ and}$$

one or more instructions for generating a pseudo-random number output, P_n, in accordance with the following equation:

$$P_n=f_{3DES}(K, P_{n-1}),$$ wherein f_{3DES} represents the operation

of triple DES encryption hardware, and P_{n-1} is the previously generated pseudo-random number. (*Emphasis added.*)

Applicants submit that this amendment overcomes the §101 rejection because the recited "program" is stored on a computer-readable medium, thereby clearly involving tangible embodiments. Thus, Applicants submit that claim 12 fully complies with the requirements of 35 U.S.C. §101 and request that the rejection to claim 12 be withdrawn and the claim allowed. Because dependent claims 13-22 depend on claim 12, Applicants respectfully submit that the rejection to claims 13-22 should be withdrawn, and claims 13-22 should be placed in condition for allowance.

II. Claim Rejections – 35 U.S.C. § 112, 2nd Paragraph

Claims 1-22 stand rejected under 35 U.S.C. §112, second paragraph as allegedly "being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention." (Office Action, pg. 2) Specifically, the Office Action alleges that for claim 1, "A" fails to be defined and the phrase "B is a second constant" lacks meaning. The Office Action further alleges that the same arguments similarly apply to claim 12. Furthermore, the Office Action alleges that for claims 9, 10, 10 and 20, the phrase "the first constant A" lacks clear antecedent basis.

Applicants have amended claim 1 to recite:

> 1. A method for generating pseudo-random numbers, comprising the steps of:
>
> > loading a current seed value S_j from a non-volatile storage;
> >
> > loading a value, E, representative of environmental randomness;
> >
> > loading a value, C, representative of configuration data;
> >
> > ***reading a first fixed value, A;***
> >
> > ***reading a second fixed value, B;***
> >
> > generating a new seed value, S_{j+1}, in accordance with the following equation:
> >
> > > $S_{j+1}=f(S_j; A; C; E)$, wherein f represents a selected encryption
>
> algorithm, and wherein S_j is concatenated with A, which is concatenated with C which is concatenated with E;
>
> > writing the new seed value S_{j+1} to the non-volatile storage;
> >
> > generating a key, K, in accordance with the following equation:
> >
> > > $K=f(S_j; B; C; E)$, and
> >
> > generating a pseudo-random number output, P_n, in accordance with the following
>
> equation:
>
> > > $P_n=f_{3DES}(K, P_{n-1})$, where f_{3DES} represents the
> >
> > operation of triple DES encryption hardware, and P_{n-1} is the previously generated pseudo-random number. (*Emphasis added.*)

Similarly, Applicants have amended claim 12 to recite:

> 12. A computer-readable medium having a program stored thereon for generating pseudo-random numbers, the program comprising:
>
> > one or more instructions for loading a current seed value S_j from a non-volatile storage;
> >
> > one or more instructions for loading a value, E, representative of environmental randomness;
> >
> > one or more instructions for loading a value, C, representative of configuration data;
> >
> > ***one or more instructions for loading a first fixed value, A;***
> >
> > ***one or more instructions for loading a second fixed value, B;***
> >
> > one or more instructions for generating a new seed value, S_{j+1}, in accordance with the following equation:
> >
> > > $S_{j+1}=f(S_j; A; C; E)$, wherein f represents a selected encryption
>
> algorithm, and wherein S_j is concatenated with A, which is concatenated with C which is concatenated with E;
>
> > one or more instructions for writing the new seed value S_{j+1} to the non-volatile storage;
> >
> > one or more instructions for generating a key, K, in accordance with the following equation:
> >
> > > $K=f(S_j; B; C; E)$; and
> >
> > one or more instructions for generating a pseudo-random number output, P_n, in

accordance with the following equation:

$$P_n = f_{3DES}(K, P_{n-1}),$$ wherein f_{3DES} represents the operation

of triple DES encryption hardware, and P_{n-1} is the previously generated pseudo-random number. (*Emphasis added.*)

Applicants have amended claims 1 and 12 to address the §112 rejections for the elements referenced above. Accordingly, Applicants submit that the rejection of claim 1 and claim 12 under §112, second paragraph should be withdrawn. Additionally, claims 2 – 11, which depend from claim 1, and claims 13-22, which depend from claim 12, are believed to comply with §112, second paragraph for at least the same reasons. Applicants respectfully submit that the rejection of these claims should be withdrawn, and the claims should be placed in condition for allowance.

III. Objection to the Specification

The Office Action indicates that the specification is objected to because of a plurality of informalities. Specifically, the Office Action indicates that "Page 2, second to last line and lines 8-9 of the abstract; "B is a second constant" should read "A is a first constant. Page 4;in line 6 "102" should be "104" and in line 7 "104" should be "102." (Office Action, pg. 3) Applicants have amended the specification, as indicated above. Applicants submit that no new matter is added. Accordingly, Applicants submit that the objection to the specification of the disclosure should be withdrawn.

CONCLUSION

It is not believed that any fees are required, beyond those which may otherwise be provided for in the documents accompanying this paper. However, in the event that additional fees are necessary, such fees are hereby authorized to be charged to Deposit Account No. 20-0778.

Respectfully submitted,

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